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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,480	05/16/2006	Bruno Aeberhard	3630	3036

7590
Striker Striker & Stenby
103 East Neck Road
Huntington, NY 11743

12/02/2008

EXAMINER

GATES, ERIC ANDREW

ART UNIT	PAPER NUMBER
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3726

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,480	Applicant(s) AEBERHARD ET AL.	
	Examiner ERIC A. GATES	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 and 21 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to Applicant's amendments filed 20 August 2008 and 21 August 2008.

Drawings

2. The drawings were received on 20 August 2008. These drawings are acceptable.

Specification

3. The abstract of the disclosure is objected to because the word "assures" incorrectly appears twice in a row. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 12 is objected to because of the following informalities: the phrase "which has a dd with a male thread" should be replaced with "which has a male thread".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack (US 5,988,958) in view of Wittenstein (EP 0 661 474).

7. Regarding claims 1-3, Mack discloses in Figures 1 and 3 a hand-held power tool 1, having a chuck 2 for a tool, having a drive spindle 16/17/19 which drives the chuck and protrudes with a spindle head 17 into a recess 15/18 embodied in the chuck, and having connecting means 15/21, operative between the spindle head and the recess, for connecting the drive spindle and the chuck in a manner fixed against relative rotation, wherein the recess in the chuck is embodied with a stepped diameter and has an inner portion 15 and an adjacent outer portion 18 with an inside diameter that is greater than that of the inner portion.

Mack does not disclose wherein the connecting means have axially extending cutting edges, embodied on the spindle head on a circumference of a portion of the spindle head that is set back from a free end of the spindle head and surrounding said portion of the spindle head, wherein the cutting edges cut into the surrounding wall of the outer portion when the chuck is being slipped onto the spindle head, wherein on the free end of the spindle head, a guide portion preceding said portion of the spindle head is embodied, whose outside diameter, for guiding the chuck, is adapted to the inside diameter of the inner portion of the recess, or wherein the inside diameter of the outer portion of the recess in the chuck, so that the cutting edges on the spindle head can cut into the chuck, is smaller than the outside diameter of the cutting edges. Wittenstein teaches the use of a shaft 1 having a connecting means B that has axially extending

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cutting edges that cut into a receiving hole section B' for the purpose of increasing centering accuracy for the mounting of the shaft, wherein on the free end of the shaft, a guide portion C preceding said portion of the shaft is embodied, whose outside diameter, for guiding the chuck, is adapted to the inside diameter of the inner portion of a recess C' to be inserted into, and wherein the inside diameter of the outer portion of the recess in the chuck is smaller than the outside diameter of the cutting edges for the purpose of the cutting edges on the shaft cutting into the recess. Therefore it would have been obvious to one having ordinary skill in the art to have combined the tool of Mack with the connecting means of Wittenstein in order to have a simpler yet accurate means for connecting the drive spindle with the chuck.

8. Regarding claim 5, the modified invention of Mack discloses wherein the recess and spindle head are embodied cylindrically, and the cutting edges are formed by a notched toothing encircling the spindle head (as modified by Wittenstein).

9. Regarding claim 6, the modified invention of Mack discloses wherein the recess is embodied cylindrically and the spindle head, at least in the region of the portion of the spindle head that has the cutting edges, is embodied as a polygonal prism; and that the cutting edges are formed by the corner edges of the polygonal prism (the cutting edges of Wittenstein are formed as a knurling which in a cross section would inherently appear as a polygonal prism).

10. Regarding claim 7, the modified invention of Mack discloses the invention substantially as claimed, except Mack does not disclose wherein the polygonal prism is a regular hexagonal prism, whose diagonal corner measurement is greater than the

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inside diameter of the outer portion of the recess. However, it would have been an obvious matter of design choice to have made the polygonal prism of Wittenstein of whatever form or shape was desired or expedient, such as a regular hexagonal prism, which would only require less cutting edges and flat portions between the edges, for the purpose of providing a simpler shape than the polygonal prism of Wittenstein. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mack (US 5,988,958) in view of Wittenstein (EP 0 661 474) and further in view of Maus (EP 0 178 537).

12. Regarding claim 4, the modified invention of Mack discloses the invention substantially as claimed, except Mack does not distinctly disclose wherein the spindle head with the cutting edges is hardened, or is of harder material than the chuck. Maus teaches the use of a smooth shaft on which a motor element 2 is fastened by splines 4 which cut into the shaft, the splines being made of a material that is harder than the shaft for the purpose of making it so that the harder splines will cut into the softer shaft material. Therefore it would have been obvious to one having ordinary skill in the art to have combined the tool of Mack with the hard cutting splines of Maus in order to make it easier to push the cutting edges of the spindle into the chuck.

13. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack (US 5,988,958) in view of March (US 2,874,985).

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14. Regarding claims 8-12, the modified invention of Mack does not disclose the spindle head having a coaxial threaded bore terminating in a free face end into which a securing screw is threadingly coupled to axially brace the chuck, the securing screw comprises a screw head and a male threaded screw shank, the chuck further comprises a stepped bore having a smaller diameter, female-threaded portion terminating into the chuck recess, and the screw can be braced on the spindle head via a chamfer face surrounding the threaded bore opening or on the bottom of the threaded bore embodied as a blind bore.

March '985 shows in Figure 1 a hand-held power tool (10) having a chuck (12), a spindle (11) which drive the chuck and protrudes with a spindle head (11g) into a recess (10c) of the chuck, and a connection means (11h and col. 2, lines 40-45) for connecting the drive spindle and the chuck in a manner fixed against rotation. March '985 further shows the spindle head having a coaxial threaded bore (11j) terminating in a free face end into which a securing screw (22) is threadingly coupled to axially brace the chuck, the securing screw comprises a screw head (Fig. 1) and a male threaded screw shank (Fig. 1), the chuck further comprises a stepped bore (Fig. 1) having a smaller diameter, female-threaded portion terminating into the chuck recess, and the screw can be braced on the spindle head via a chamfer face (Fig. 1) surrounding the threaded bore opening or on the bottom of the threaded bore embodied as a blind bore (Fig. 1). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the hand-held power tool of Mack '958 to include a securing screw

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as taught by March '985 to provide for a releasable securing means to securely draw the chuck onto the spindle (col. 2, lines 58-67).

Response to Arguments

15. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

16. For the reasons as set forth above, the rejections are maintained.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC A. GATES whose telephone number is (571)272-5498. The examiner can normally be reached on Mon-Thurs 8:45 - 6:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. A. G./
Examiner, Art Unit 3726
23 November 2008

/DAVID P. BRYANT/
Supervisory Patent Examiner, Art Unit 3726